

Applicants respectfully traverse the rejections and submit that the cited references do not teach or suggest the present invention based on the following.

The Examiner relies on WO '573 as in the previous Actions. The Examiner recognizes that WO '573 does not teach the hydrated metal compound which is a composite of  $\text{MgO} \cdot \text{ZnO} \cdot \text{H}_2\text{O}$  or  $\text{MgO} \cdot \text{NiO} \cdot \text{H}_2\text{O}$  and relies on JP '408 for the teaching of a flame-retardant thermoplastic resin composition comprising an inorganic oxide, such as magnesium oxide, nickel oxide, aluminum oxide, zinc oxide, etc., wherein the exemplary oxides may be used alone or in combination.

Specifically, the Examiner indicates that hydrated metal oxides such as aluminum hydroxide and magnesium hydroxide are described as flame-retardant in JP'408 and it is described that they can be used in the form of a mixture. Therefore, the Examiner indicates that the composite metal hydroxide of  $\text{MgO} \cdot \text{ZnO} \cdot \text{H}_2\text{O}$  or  $\text{MgO} \cdot \text{NiO} \cdot \text{H}_2\text{O}$  (of the present invention) may be applied. However, JP '408 does not teach or suggest the hydrated metal compound which is a composite of  $\text{MgO} \cdot \text{ZnO} \cdot \text{H}_2\text{O}$  or  $\text{MgO} \cdot \text{NiO} \cdot \text{H}_2\text{O}$  as recited in present claim 1. JP '408 teaches that an inorganic oxide may be used in the flame-retardant composition and specifically exemplifies titanium oxide ( $\text{TiO}_2$ ), but there is no teaching or suggestion of a hydrated metal compound, much less a hydrated metal compound which is a composite of  $\text{MgO} \cdot \text{ZnO} \cdot \text{H}_2\text{O}$  or  $\text{MgO} \cdot \text{NiO} \cdot \text{H}_2\text{O}$ .

The composite metal hydroxide of the present invention is a composite of hydroxides and is completely different from a mixture of respective hydroxides. In addition, as is clear from the test results which have been previously submitted, high flame retardancy and a high

degree of expansion can be obtained by using the above-mentioned composite metal hydroxide, in comparison with using hydrated metal oxides solely.

Further, one of ordinary skill in the art would not have been motivated to modify the inorganic oxides disclosed in JP '408 and employ a hydrated metal hydroxide composite as recited in the present claims. Namely, in JP '408, inorganic oxides such as aluminum hydroxide and magnesium hydroxide are exemplified as conventional in the art, and the problems such as the large amount necessary to obtain enough flame retardancy and deteriorated mechanical properties of the molded product obtained therefrom, are disclosed. Additionally, it is described that in order to solve these problems, heat expansive graphite and boron-containing compounds are used in combination as flame-retardant. Accordingly, a person skilled in the art would not have been motivated to use inorganic oxides causing these problems as a flame-retardant. Even further there is no description or suggestion in JP '408 for making a composite, which is recited in the present claims. Therefore, it is not expected from JP '408 to employ the composite metal hydroxide employed in the present invention.

None of the other cited art remedies the deficiencies of WO '573 and JP '408. Thus, the cited references do not teach or suggest the present invention, whether taken alone or in combination. Accordingly, the present invention is not rendered obvious by the cited references and Applicants respectfully request withdrawal of the §103 rejections.

## **II. Conclusion**

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the

Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.


Respectfully submitted,

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